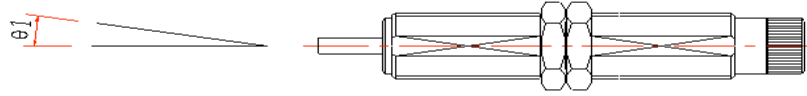
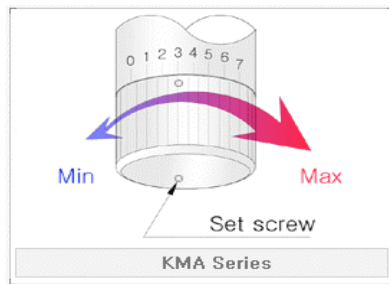


## Installation of KOBA SHOCK ABSORBERS ATRON LTD.

1. The Shock Absorber of the KOBA is designed to operate several million times and assures its long life if you keep following regulations.
  - 1) Ensure that a size of a shock absorber is correct.
  - 2) Ensure that the load impact should be perpendicular to the axis of the shock absorber when installing each

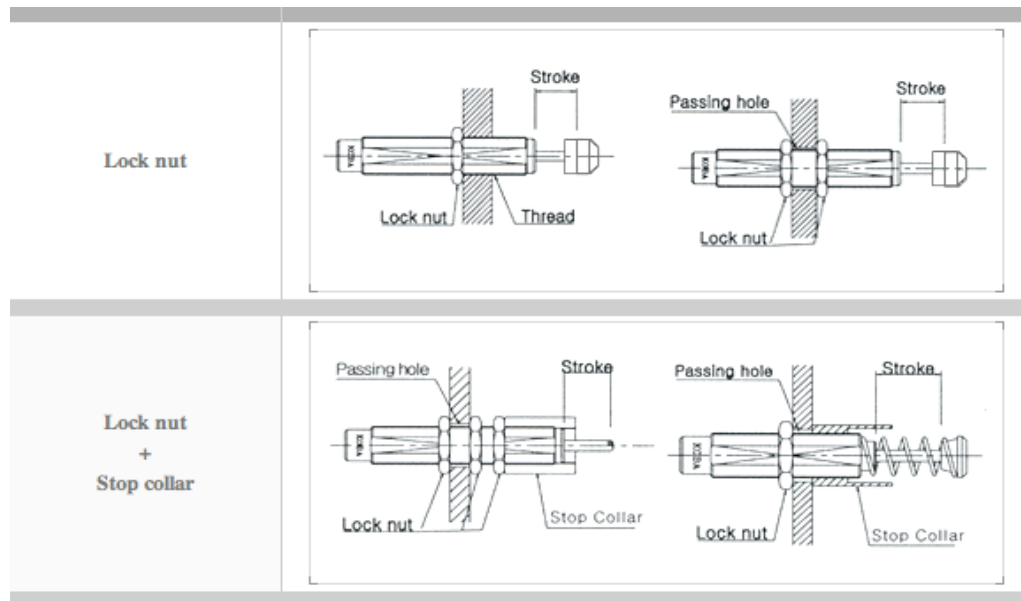


- 3) other.
- 3) Ensure that the operating temperature (-20~80°C) of the shock absorber is correct. If required special range of temperature, contact to KOBA.
- 4) Ensure to lock securely such as mount bolts, lock nuts and set screws in place with the shock absorber.
- 5) Do not paint or weld to the shock absorber body.
- 6) Do not apply any clamp pressure to the piston rod. (If not, it makes oil leak.)



- To obtain correct adjustment setting, do as following.
1. Mount the shock absorber securely in place.
  2. Set adjustment from 0 to max by gradually until desired damping force is achieved.
  3. Lock the adjustment by tightening a set screw with a hex wrench provided.

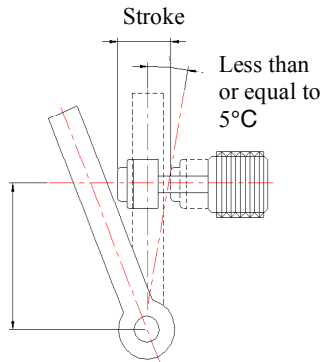
### 2. Installation Instructions:



- 1) Some shock absorbers with Bumper Head type of KMA, KMS08~25, 27 series do not require Stop collar. The bumper head operates as a stopper.
- 2) Mounting and Installation for Rotary Motion.

## Installation of KOBA SHOCK ABSORBERS ATRON LTD.

The shock absorber should be mounted at a radius that is equal to or greater than 10times the stroke of the piston.



As shown the picture at left, the shock absorber should be mounted at a radius that is equal to or greater than 10times the stroke of the piston. If the radius is less or shorter than 10 times the stroke of the piston, side load will occur and lead to short life.

Especially, do not apply Urethane cap to the rotary application. In case the centerline of shock absorber is short, please contact to KOBA. (Use of a side load adaptor is available.)